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July 6 H
                                                  1922, May 16 M 100-inch
                           —33 24 B3 7.2 1920, Aug.
H. D. 163868
                 17 53.3
                                                               6 H
                                                                  Η
                                                  1921, July
                                                               6
                                                                  Η
                                                               7 H
                                                        Aug. 24 H 100-inch
                             —15 42 B2 8.1 1921, Aug. 1 H
" 15 M
                 18 6.1
H. D. 166566
                                                                       60-inch
                                                  1921, Aug. 1 H
1922, June 14 H 100-inch
H. D. 168229
                 18 13.6
                             -18 16
                                        В
                                  NOTES
                  Remark in H. D., "The lines are indistinct." On the
H. D. 154450
                    slit spectrograms bright H\beta is strong.
H. D. 160202
                  The bright portion of H\beta is weak and inconspicuous.
DM —27°11944
                  A most remarkable spectrum. Bright H\alpha and B\beta are
                    extremely strong compared with the continuous spec-
                    trum. Numerous bright lines are present, most of
                    which are due to hydrogen, helium, or iron (enhanced). They are broad and have absorption borders on the violet side as in P Cygni.
H. D. 163868
                  The bright H\beta is weak.
H. D. 166566
                  The bright H\beta is weak and narrow.
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MILTON L. HUMASON. PAUL W. MERRILL.

Note on the Spectrum of RY Scuti, B. D.—12°5045 H. D. 169515 R. A. 1900—18h19.9m; Dec. 1900——12°45'; Mag. Var.; Spectrum Pec.

The bright lines present in this spectrum in August, 1921 (including the nebular line λ 4658) were described in these Publications for April, 1922, page 134. An additional slit spectrogram, secured by Mr. Humason on May 17, 1922, shows little if any change from the 1921 plates. The hydrogen lines $H\beta$ and $H\gamma$ are clearly marked, narrow emission lines. Absorption borders, if present at $H\beta$, are very weak; at $H\gamma$ there appears to be some absorption, chiefly on the violet side of the bright line. This effect at $H\gamma$ is best seen on a seven-inch

camera plate taken on September 8, 1921. On all plates, however, the bright portion is the outstanding feature.

It would appear therefore, from the remarks in the Henry Draper Catalogue, of which the volume containing this star has become available since the first note was written, that a change must have taken place in the hydrogen lines since they are described from the Harvard plates as "very faint dark lines." The presence of bright lines (presumably $\lambda\lambda$ 4658, 4701) was suspected.

Direct photographs by Mr. Hubble with the 60-inch telescope on May 24, 1922, with exposure times from one second to 60 minutes, did not reveal any nebulosity about the star.

The following photometric notes are included in the H. D. remarks: "RY *Scuti* Variable. Max. 8.3, Min. 9.2. Class and period, unknown." More data would be welcome.

PAUL W. MERRILL.

May 29, 1922.

SUMMARY OF MOUNT WILSON MAGNETIC OBSERVATIONS OF SUN SPOTS FOR JULY AND AUGUST, 1922

The sun-spots were somewhat more active during July than in the two preceding months, but during August there was less activity than at any time since the last minimum. The mean number of groups abserved daily was 1.1 for July and 0.5 for August. In July there were but nine spotless days, while in August there were seventeen, sixteen of which were consecutive.

A New Planetary Nebula R. A. 18^h46^m22^s Dec. + 20°44′ (1920)

Bright line images of this object are seen on two photographs made with the 10-inch Cooke telescope and 6° objective prism on June 21 and 22, 1922. The following estimates of the intensities of the lines were made from a slitless spectrogram taken with the 60-inch telescope and focal plane spectrograph on June 22, 1922: N_1 (16), N_2 (8), $H\beta$ (14), 4471 (1.5), 4388 (0.2), 4363 (0.2), $H\gamma$ (8), $H\delta$ (4), $H\epsilon$ (1). Direct photographs made with the Hooker telescope on June 23, 1922, show the